

Notes and Remarks on North American Blattidae, Mantidae and Phasmidae,

With a Catalogue of the Forficulidae, Blattidae, Mantidae and Phasmidae
Recorded from Texas.

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The following records, unless otherwise stated, are based on material in the collection of the Academy of Natural Sciences of Philadelphia.

BLATTIDÆ.

Ischnoptera bolliana Saussure and Zehntner.

Shovel Mount, Burnet Co., Texas; June 21 and July 25, 1901 (Schaupp). Two males.

Round Mountain, Blanco Co., Texas (Schaupp). Two males.

The specimens from Round Mountain belong to the form with the median streak of dull yellowish on the pronotum.

Ischnoptera hyalina Scudder.

This species was based on one male specimen in the collection of the American Entomological Society, which is still extant, though minus the abdomen. As the original description is rather poor, the following remarks may prove of some service.

Size large (for the genus); form slender, elongate. Head with the interspace between the eyes greater than that between the ocelli; eyes very elongate pyriform, the apex posteriorly; ocelli large, touching the eyes; antennæ filiform, equal to the apex of the tegmina in length, very closely and finely hirsute, third joint not half the length of the first. Pronotum slightly transverse; anterior margin truncate; the posterior subtruncate, a very slight and very obtuse median angle; lateral margins and angles rounded; lateral portions considerably depressed, disk slightly impressed. Tegmina elongate; sutural and apical and median thirds of the costal margin subparallel, apex evenly rounded; basal field equal to about one fourth the length of the tegmina; anal field elongate ovoid in shape. Anterior femora with three large apical, five median, and an intervening series of very fine spines present on the anterior margin, posterior margin with five spines, no genicular spine present; tibiæ about three-fourths the length of the femora; tarsi equal to the femora in length, the metatarsi slightly exceeding the apical joint in length. Median femora

with six apical and median spines on the anterior margin, posterior margin with the same number, genicular spine very long and slender; tibiæ about equal to the femora in length. Posterior femora with four spines on the apical half of the anterior margin; posterior margin with five spines on the apical half, genicular spine normally present; * tibiæ half again as long as the femora; tarsi about equal to the femora in length, metatarsi exceeding the remaining joints in length, arolia rather minute.

The color description given in the original is very good and describes the insect perfectly.

Habitat—Delaware.

MEASUREMENTS.

Total length,	25. mm.
"Length of pronotum,	4.25 mm."
"Breadth of pronotum,	6. mm."
"Length of antennæ,	25. mm."
"Length of tegmina,	21.5 mm."
Greatest width of tegmina,	6.25 mm.

This species is more closely related to *I. pennsylvanica* (De Geer) than any of the other species examined. It can be immediately distinguished by the larger size, different coloration and more longitudinal pronotum. Close relationship also exists with *I. uhleriana* Saussure, but the latter is a much smaller species, with a rugulose interocular region and a differently shaped basal field of the tegmina. It is quite possible that this species is the male of *Temnopteryx major* Saussure and Zehntner. Blatchley † has recorded the capture of males of *major*, and the type of *hyalina* agrees very well with his description. If such should prove to be the case, *major* must fall as a synonym of Scudder's species.

Ischnoptera uhleriana Saussure.

Shovel Mount, Burnet Co., Texas; July 7 and 10, 1901 (Schaupp). Two males.

Round Mountain, Blanco Co., Texas (Schaupp). Two males.

Ischnoptera unicolor (Scudder).

Boykins, Southampton Co., Va. (C. W. Johnson). One male.

* In the type both are absent, though this condition is seen to be accidental.

† The Orthoptera of Indiana, p. 183.

Ischnoptera pennsylvanica (De Geer).

Virginia. One female.

Lehigh Gap, Northampton Co., Pa.; July 24, 1903 (Rehn).
One female.

I fully agree with Blatchley* as to the identity of *Phyllo-*
dromia borealis and this species.

Eurycotis floridana (Walker).

Mianui, Dade Co., Florida; June 28, 1899 (Pilsbry). One
female.

Periplaneta americana (Linnæus).

Shovel Mount, Burnet Co., Tex.; October 16, 1901 (Schaupp).
Twelve specimens,—three mature, nine immature.

Phoenix, Maricopa Co., Arizona; April 20 and 27, 1902
(Oslar). Two specimens, male and female.

Florence, Pinal Co., Arizona; May 21 and June 5, 1903
(Biederman). Two specimens, male and female.

Periplaneta australasiæ (Fabricius).

Philadelphia, Pa., June 30, 1898 (Rehn). One male.

Panchlora virescens (Thunberg).

Philadelphia, Pa. One male.

This specimen was undoubtedly imported on some tropical
fruit, possibly bananas. Bananas received at Philadelphia are
almost entirely from Jamaica. This is the first record for this
species from the United States.

Plectoptera poeyi (Saussure).

Florida. One female.

This is the first record for this Cuban species in the United
States.

Homœogamia apacha Saussure.

Florence, Arizona; May 8, June 6, July 15 and 17, 1903
(Biederman). Ten males.

Homœogamia erratica Rehn.

Florence, Arizona; June 8, July 17, 18 and 22, 1903 (Bie-
derman). Eleven males (one immature).

* The Orthoptera of Indiana, pp. 179-180.

Cryptocercus punctulatus Scudder.

Blowing Rock, Watauga Co., North Carolina (Willcox).
One female.

MANTIDÆ.

Yersinia solitaria Scudder.

Gallinas Cañon, San Miguel Co., New Mexico; July 20, 1902 (Oslar). One male.

This record extends the range of the species, which now covers the foot-hills and plain country from western Nebraska to northern New Mexico.

Litaneutria minor (Scudder).

Blanco Co., Texas. One male.

Shovel Mount, Burnet Co., Texas; June 28–July 25, Oct. 1–Nov. 17 (Schaupp). Thirty-two males, six females.

Tempe, Maricopa Co., Arizona; April 26, 1902 (Oslar).
One male.

Florence, Pinal Co., Arizona; May 14, 19, and June 13, 1903 (Biederman). Four males, two females.

The series from Shovel Mount comprises thirty-eight specimens, and exhibits a very great diversity of coloration.

Stagmomantis carolina (Johannson).

Washington Co., Texas. One female.

Shovel Mount, Burnet Co., Texas; September–November 16th (Schaupp). Twelve males, one female.

Lake Valley, Sierra Co., New Mexico (Cope). Four males.

“Fort Yuma, Cal.”* (Dr. J. K. Corson). One female.

The male individuals from Shovel Mount are, with one exception, very uniform in coloration.

Stagmomantis limbata (Hahn).

Shovel Mount, Burnet Co., Texas; Nov. 16, 1901 (Schaupp).
One female.

Las Truchas, Guadeloupe Co., New Mexico [4600 feet]
(Clara Gerhardt). One male, submitted by Prof. Cockerell.

Phœnix, Maricopa Co., Arizona. One male.

* This refers to California near the present town of Yuma, Arizona.

Oligonyx scudderi Saussure.

Shovel Mount, Burnet Co., Texas; October 4-18, 1901 (Schaupp). Five males, one female.

Arkansas. Collection of T. D. O'Connor, of New York City. One male.

PHASMIDÆ.

Megaphasma denticrus (Stål).

Shovel Mount, Burnet Co., Texas; July 5, 1901 (Schaupp). One male, one female.

The male is of rather small size when compared with an individual of that sex from Helotes Creek, Texas.

Diapheromera veliei (Walsh).

Shovel Mount, Burnet Co., Texas; Sept. 12 and Nov. 16, 1901 (Schaupp). One male, one female.

A CATALOGUE OF TEXAN FORFICULIDÆ, BLATTIDÆ, MANTIDÆ AND PHASMIDÆ.

This catalogue is compiled from the references given by Scudder in his Index to North American Orthoptera, with the more recent additions interpolated. The records given in the preceding portion of this paper, and those from specimens contained in the collection of the Academy of Natural Sciences of Philadelphia are also included. This work, being in fact only a "first list," is necessarily very brief and somewhat unsatisfactory in character, but this is wholly due to the lack of definite localities, something greatly to be deplored when we consider the very extensive area and varied conditions of the great State of Texas.

FORFICULIDÆ.

Labidura "*riparia* (Pallas)." (Western?) Texas, March 10 (Pope).

Spongophora brunneipennis (Serville). Dallas, Dallas Co., Feb. 17 and 23, Aug. 19 (Boll). Clifton, Bosque Co., (Belfrage). "A common species, apparently, in all parts of the State." (Scudder).

Apterygida exilis (Scudder). Texas (Uhler).

Apterygida linearis (Eschscholtz). Texas (Uhler).

Labia guttata (Scudder). Bosque Co. (Belfrage).

Labia melancholica (Scudder). Waco, McLennan Co., or near Austin, Travis Co., Feb. 24 (Belfrage).

Labia minor (Linnæus). Abundant according to Scudder. Clifton, Bosque Co., June and September (Belfrage).

BLATTIDÆ.

Pseudomops cincta (Burmeister). Texas; recorded by Scudder.

Ischnoptera bolliana Saussure and Zehntner. Texas; recorded by Saussure and Zehntner. Shovel Mount, Burnet Co., June 21 and July 25, 1901 (Schaupp). Round Mountain, Blanco Co. (Schaupp).

Ischnoptera consobrina Saussure. Texas; recorded by Saussure and Zehntner.

Ischnoptera coultoniana Saussure. Texas; recorded by Saussure and Zehntner.

Ischnoptera inequatis Saussure and Zehntner. Texas; recorded by Saussure and Zehntner.

Ischnoptera uhleriana Saussure. Texas; recorded by Saussure and Zehntner.

Temnopteryx texensis Saussure and Zehntner. Texas; recorded by Saussure and Zehntner.

Pelmatosilpha rotundata Scudder. Texas; recorded by Scudder.

Periplaneta americana (Linnæus). Texas; recorded by Scudder.

Homæogamia bolliana Saussure. Texas (Boll). Shovel Mount, Burnet Co., Sept. 2-Oct. 29 (Schaupp). Round Mountain, Blanco Co. (Schaupp). Austin, Travis Co., Feb. 19, 1903 (Wheeler). San Marcos, Hays Co. (Pilsbry). Devils River, Valverde Co. (Pilsbry). Pecos High Bridge, Valverde Co. (Pilsbry). Victoria, Victoria Co. Dallas, Dallas Co. Carrizo Springs, Dimmit Co. This is apparently one of the most abundant species of Texan Blattidæ.

Chorisoneura texensis Saussure and Zehntner. Texas (Boll).

MANTIDÆ.

Litaneutria minor (Scudder). Texas; recorded by Scudder. Shovel Mount, Burnet Co., June 28-July 25, Oct. 1-Nov. 17 (Schaupp). Blanco County.

Phasmomantis sumichrasti (Saussure). Texas; recorded by Saussure and Zehntner.

Stagmomantis carolina (Johannson). Texas; recorded by Saussure and Zehntner. Washington Co.; Shovel Mount, Burnet Co.; Sept.-Nov. 16 (Schaupp).

Stagmomantis limbata (Hahn). Texas (Schaupp). Ringgold Barracks, Starr Co. (Schott). Shovel Mount, Burnet Co.; Nov. 16, 1901 (Schaupp).

Brunneria borealis Scudder. Texas (A. Agassiz). Gulf coast of Texas (Aaron).

Oligonyx scudleri Saussure. Texas (Boll, Belfrage, Lincecum). Dallas, Dallas Co. (Boll). Shovel Mount, Burnet Co.; Oct. 4-18, 1901 (Schaupp).

Theoclytes chlorophæa (Blanchard). Recorded from Mexico and Louisiana, and in all probability will occur in Texas. Scudder has recorded a specimen from Matamoras, State of Tamaulipas, opposite Brownsville, Cameron County.

PHASMIDÆ.

Pseudosermyle strigata (Scudder). Texas (Boll, Lincecum).

Pseudosermyle banksii Caudell. Brazos County, September (Banks). Buna, Jasper Co., November 15, 1902 (Hopkins).

Megaphasma denticrus (Stål). New Braunfels, Comal Co. (Lincecum). Gulf Coast (Aaron). Helotes, Bexar Co. (Marnock). Victoria, Victoria Co. (Caudell). Shovel Mount, Burnet Co.; July 5, 1901 (Schaupp).

Diapheromera femorata (Say). Dallas, Dallas Co. (Boll). Ringgold Barracks, Starr Co. (Schott).

Diapheromera veliei Walsh. Dallas, Dallas Co. (Boll). Ringgold Barracks, Starr Co. (Schott). Pecos River [New Mexico or Texas] (Pope). Shovel Mount, Burnet Co. (Schaupp).

Anisomorpha buprestoides (Stoll). Texas (Boll).

Some North American Bees: *Osmia* and *Triepeolus*.

BY T. D. A. COCKERELL.

Triepeolus mesillæ, Ckll, var. *a*.

♀.—Scutellum with two very large spots; anterior lateral margins of mesothorax faintly reddish; pleura with a large red patch.

Hab.—Las Cruces, N. M., September 22, at rest, hanging by jaws on *Verbesina encelioides*. The color-variation here described nearly agrees with the normal coloration of the closely allied *T. bardus*, as given by Mr. Brues. The insect may be known from *bardus* by the conspicuous light hair about base of antennæ, the red anterior margin of clypeus, and the straight or barely curved scutellar spines. Perhaps *mesillæ* is not more than a geographical name of *bardus*; the latter occurs from eastern Texas to Illinois.